INTERNATIONALSEARCHREPORT

International application No. PCT/JP2004/019464

A. CLASSIFICATIONOF SUBJECT MATTER			
Int.Cl ⁷ B23C 3/00,5/10			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols)			
Int.Cl ⁷ B21J 13/02 B23C 3/00,5/10			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Japanese Utility Model Gazette 1922-1996, Japanese Publication of Unexamined Utility Model Applications 1971-2005, Japanese Registered Utility Model Gazette 1994-2005, Japanese Gazette Containing the Utility Model 1996-2005			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.
A	JP 2001-105086 A(HONDA MOTO 2001.04.17 (Family:none)	OR Co., Ltd.)	1-8
A	JP 2002-239676 A(YUTAKA SEIMITSU KOGYO, Ltd.) 2002.08.27(Family:none)		1-8
A	JP 9-150305 A(RIKEN)		1-8
	1997.06.10 & US 5919012 A & EP 788040	A1 & DE 69619789 T	
A	JP 6-134648 A (MAKINO MILLING MACHINE Co	T.t-d.	1-8
•	1994.05.17		
	& US 5378091 A & EP 579371	AI & DE 6932639/ T	
A JP 8-263122 A (HONDA MOTOR (1996.10.11 (Family:none)		Co., Ltd.)	1-8
Further documents are listed in the continuation of Box C. See patent family annex.			
* Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to considered to be of particular relevance "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention			
"E" earlier application or patent but published on or after the inter- "X" document of particular relevance; the claimed invention cannot national filing date "E" document of particular relevance; the claimed invention cannot be considered to involve an			
"L" document which may throw doubts on priority claim(s) or which inventive step when the document is taken alone is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to inventive at a supervisor of the document is			
"O" document referring to an oral disclosure, use, exhibition or other means be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art			
"P" document published prior to the international filing date but later "&" document member of the same patent family than the priority date claimed			
Date of the actual completion of the international search Date of mailing of the international search report			
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